

# Curriculum Vitae

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## **Fernando Fernandes Paiva**

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### **PERSONAL INFORMATIONS**

Birth Date: 24/02/1980  
Birth City: Sao Paulo  
Birth State: Sao Paulo  
Birth Country: Brazil

### **EDUCATION**

#### **2005 – Predoctoral Fellow**

National Institutes of Health, NIH, Bethesda, MD, USA.  
Advisor: Afonso C. Silva, PhD

#### **2004 – Ph.D. in Applied Physics**

University of Sao Paulo, USP, Sao Paulo, Brazil.  
Thesis: BOLD and Perfusion Based fMRI Methodologies Development: An  
Adiabatic Approach.  
Advisor: Prof. Alberto Tannús, PhD

#### **2002 - 2004 MSc. in Applied Physics**

University of Sao Paulo, USP, Sao Paulo, Brazil.  
Dissertation: Magnetic Resonance Imaging Methodology Using a Single Inversion  
Adiabatic Pulse.  
Advisor: Prof. Alberto Tannús, PhD

#### **1998 – 2001 B.S. in Physics**

University of Sao Paulo, USP, Sao Paulo, Brazil.  
Undergraduate Project: Magnetic Resonance Imaging and Spectroscopy  
methodologies using adiabatic RF pulses.  
Advisor: Prof. Alberto Tannús, PhD

### **RESEARCH INTERESTS**

Magnetic Resonance Imaging  
Adiabatic Pulses  
Perfusion based fMRI  
BOLD based fMRI

## **TEACHING FELLOW POSITIONS**

### ***UNIVERSITY OF SAO PAULO – USP – Institute of Physics of Sao Carlos***

02/2002 – 07/2002 Department of Physics and Materials Science,  
University of Sao Paulo.

Course: FCM184 – Laboratory of Physics III.

Supervisor: Luis Gustavo Marcassa

08/2002 – 12/2002 Department of Physics and Materials Science,  
University of Sao Paulo.

Course: FCM110 – Laboratory of Physics IV.

Supervisor: Luis Gustavo Marcassa

02/2003 – 07/2003 Department of Physics and Informatics, University  
of Sao Paulo.

Course: FFI106 – Laboratory of Physics III.

Supervisor: Luis Gustavo Marcassa

08/2003 – 12/2003 Department of Physics and Materials Science,  
University of Sao Paulo.

Course: FCM110 – Laboratory of Physics IV.

Supervisor: Luis Gustavo Marcassa

02/2004 – 07/2004 Department of Physics and Informatics, University  
of Sao Paulo.

Course: FFI106 – Laboratory of Physics III.

Supervisor: Luis Gustavo Marcassa

08/2004 – 12/2004 Department of Physics and Materials Science,  
University of Sao Paulo.

Course: FCM110 – Laboratory of Physics IV.

Supervisor: Luis Gustavo Marcassa

02/2005 – 07/2005 Department of Physics and Materials Science,  
University of Sao Paulo.

Course: FCM184 – Laboratory of Physics III.

Supervisor: Alberto Tannus

## **HONORS AND AWARDS**

2005 Award for Best Paper Presented in Poster Section of Physics of  
Imaging in X Brazilian Congress of Medical Physics, Salvador, BA, Brazil.

2001 Award for Original and Distinguished Research in IX  
International Undergraduate Students Symposium of USP, Sao Paulo, SP, Brazil.

## PUBLICATIONS

### Papers Presented

**Paiva, Fernando Fernandes;** Martins, Mateus Jose; Vidoto, Edson Luiz Gea; Tannus, Alberto. Geometric Distortion and Ghost N/2 Artifacts Correction in Echo Planar Imaging (EPI). In: Brazilian Congress of Functional Neuroimaging, 2005, Ribeirao Preto, SP, Brazil.

**Paiva, Fernando Fernandes;** Salmon, Carlos Ernesto Garrido; Martins, Mateus Jose; Vidoto, Edson Luiz Gea; Tannus, Alberto. Interactive Viewport Development for 3D Images Visualization. In: Brazilian Congress of Functional Neuroimaging, 2005, Ribeirao Preto, SP, Brazil.

Papoti, Daniel; **Paiva, Fernando Fernandes;** Vidoto, Edson Luiz Gea, Tannus, Alberto. Development of a NMR Transducer for Small Animals Functional and Anatomical Studies. In: Brazilian Congress of Functional Neuroimaging, 2005, Ribeirao Preto, SP, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto. Development of a Processing Package for Echo Planar Imaging (EPI). In: X Brazilian Congress of Medical Physics, 2005, Salvador, BA, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto. 3D MRI Visualization Package Development. In: X Brazilian Congress of Medical Physics, 2005, Salvador, BA, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto. Development of BOLD and ASL perfusion based fMRI methodologies: adiabatic pulses approach. In: VIII Graduated Students Workshop, 2004, Sao Carlos, SP, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto; Foerster, Bernd Uwe. Magnetic resonance imaging using an inversion-recovery pulse sequence with a single adiabatic inversion pulse. In: II Brazilian Symposium of Physical Engineering, 2003, Sao Carlos, SP, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto; Foerster, Bernd Uwe. Multislice inversion-recovery imaging methodology using a single adiabatic inversion pulse. In: II Graduated Students Workshop of UFSCar, 2003, Sao Carlos, SP, Brazil.

**Paiva, Fernando Fernandes;** Foerster, Bernd Uwe; Xavier, Rogerio Ferreira; Tannus, Alberto. Inversion-recovery imaging using adiabatic inversion pulses. In: XXV National Meeting Of Condensed Matter Physics, 2002, Caxambu, MG, Brazil.

**Paiva, Fernando Fernandes;** Tannus, Alberto. Inversion-recovery imaging acquisition using a single adiabatic inversion pulse. In: 54<sup>a</sup> Annual Meeting Of Brazilian Society For Science Progress, 2002, Goiania, GO, Brazil.

**Paiva, Fernando Fernandes;** Foerster, Bernd Uwe; Xavier, Rogerio Ferreira; Tannus, Alberto. Inversion-recovery imaging acquisition using a single adiabatic inversion pulse. In: IX International Undergraduate Students Symposium of USP, 2001, Sao Paulo, SP, Brazil.

**Paiva, Fernando Fernandes;** Foerster, Bernd Uwe; Xavier, Rogerio Ferreira; Tannus, Alberto. Magnetic resonance imaging and spectroscopy methodologies using

adiabatic RF pulses. In: XXIV National Meeting of Condensed Matter Physics, 2001, Sao Lourenco, MG, Brazil.

### **Didactic Materials**

Marcassa, Luis Gustavo; **Paiva, Fernando Fernandes**. Laboratory of Physics III  
– Student Guide. 2003

Marcassa, Luis Gustavo; **Paiva, Fernando Fernandes**. Laboratory of Physics IV  
– Student Guide. 2003